

Table 29. Energy Consumption Estimates by Source, Selected Years 1960-1997, Arizona

Year	Coal ^a Thousand Short Tons	Natural Gas ^b Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power ^d	Biomass ^e	Other ^{a,f}	Net Interstate Flow of Electricity/Losses ^g	Total ^h
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^a	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,c}	Total						
			Thousand Barrels															Million kWh	
1960	10	136	863	699	2,787	4,721	64	724	275	12,363	125	0	22,622	0	2,975	-	-	-4,266	-
1965	337	154	1,110	478	3,528	5,545	31	1,056	299	14,997	82	0	27,125	0	4,410	-	-	1,933	-
1970	406	193	3,679	427	4,899	6,644	165	1,304	344	21,542	105	0	39,108	0	6,103	-	-	7,594	-
1975	4,392	156	2,331	358	10,143	7,075	213	1,119	472	27,704	5,942	39	55,395	0	7,240	-	-	4,887	-
1980	11,559	166	2,061	281	10,769	7,967	73	1,589	611	30,589	1,339	71	55,350	0	9,795	-	-	-24,227	-
1985	16,364	131	2,563	184	10,179	7,154	16	1,722	556	36,148	176	0	58,699	1,130	13,987	-	-	-38,272	-
1986	14,150	101	2,530	226	11,306	7,697	56	1,704	544	37,844	41	0	61,947	9,976	14,460	-	-	-46,574	-
1987	13,375	117	2,492	207	10,648	8,374	50	1,943	615	39,271	122	0	63,721	13,458	10,133	-	-	-40,889	-
1988	14,525	124	2,683	186	10,461	8,478	56	1,721	593	40,216	55	0	64,448	22,940	7,784	-	-	-63,865	-
1989	16,871	146	2,386	210	11,419	8,157	50	1,608	608	40,648	153	123	65,361	7,850	NA	-	-	R -33,006	-
1990	16,419	127	2,367	194	12,048	8,501	20	1,508	626	39,326	28	129	64,746	20,598	NA	-	-	R -60,206	-
1991	16,805	125	2,181	188	10,370	9,642	36	1,700	560	40,593	201	216	65,687	25,096	NA	-	-	R -73,192	-
1992	17,915	130	2,984	158	11,301	8,310	3	2,095	571	41,556	106	259	67,342	25,609	NA	-	-	R -78,134	-
1993	18,991	115	2,328	128	13,549	7,892	3	1,843	581	43,026	192	131	69,673	22,049	NA	-	-	-68,638	-
1994	19,580	133	2,574	142	13,135	7,401	3	1,867	608	45,193	201	114	71,238	23,171	NA	-	-	R -70,862	-
1995	16,682	120	3,138	139	14,607	7,588	4	1,938	597	47,159	82	107	75,359	26,985	NA	-	-	R -63,448	-
1996	16,793	120	2,460	155	16,292	7,922	7	1,667	580	49,417	109	121	78,728	28,840	NA	-	-	R -60,624	-
1997	18,206	131	2,704	151	17,306	7,974	8	1,684	612	48,884	15	112	79,451	29,314	NA	-	-	-72,382	-

Trillion Btu																			
1960	0.2	140.3	5.7	3.5	16.2	25.3	0.4	2.9	1.7	64.9	0.8	0.0	121.5	0.0	32.0	R 4.0	0.0	-14.6	R 283.4
1965	7.0	166.1	7.4	2.4	20.6	30.1	0.2	4.2	1.8	78.8	0.5	0.0	145.9	0.0	46.1	R 3.7	0.0	6.6	R 375.4
1970	8.6	204.4	24.4	2.2	28.5	36.4	0.9	4.9	2.1	113.2	0.7	0.0	213.3	0.0	64.0	R 4.3	0.0	25.9	R 520.6
1975	92.4	164.3	15.5	1.8	59.1	39.0	1.2	4.2	2.9	145.5	37.4	0.2	306.7	0.0	75.3	R 5.4	0.0	16.7	R 661.0
1980	245.0	174.0	13.7	1.4	62.7	43.9	0.4	5.8	3.7	160.7	8.4	0.4	301.2	0.0	101.8	R 20.3	0.0	-82.7	R 759.6
1985	342.0	137.3	17.0	0.9	59.3	39.4	0.1	6.2	3.4	189.9	1.1	0.0	317.3	12.2	146.1	R 26.5	0.0	-130.6	R 850.9
1986	295.9	105.2	16.8	1.1	65.9	42.6	0.3	6.2	3.3	198.8	0.3	0.0	335.2	107.7	151.0	R 36.1	0.0	-158.9	R 872.3
1987	282.9	121.4	16.5	1.0	62.0	46.4	0.3	7.1	3.7	206.3	0.8	0.0	344.2	145.0	105.6	R 30.3	0.0	-139.5	R 889.9
1988	309.0	128.6	17.8	0.9	60.9	47.0	0.3	6.3	3.6	211.3	0.3	0.0	348.5	246.4	80.4	R 31.5	0.0	-217.9	R 926.5
1989	357.2	151.5	15.8	1.1	66.5	45.3	0.3	5.9	3.7	213.5	1.0	0.7	353.8	84.2	R 82.1	R 29.5	R 3.4	R -112.6	R 948.9
1990	343.6	130.8	15.7	1.0	70.2	47.3	0.1	5.5	3.8	206.6	0.2	0.8	351.1	220.0	R 79.8	R 19.5	R 3.4	-205.4	R 942.4
1991	347.5	128.2	14.5	1.0	60.4	53.7	0.2	6.1	3.4	213.2	1.3	1.2	355.0	269.5	R 74.1	R 20.2	R 3.5	-249.7	R 949.2
1992	369.0	133.7	19.8	0.8	65.8	46.4	(s)	7.6	3.5	218.3	0.7	1.5	364.4	273.4	R 21.5	R 3.5	R 3.5	-266.6	R 970.1
1993	389.8	118.0	15.4	0.6	78.9	44.2	(s)	6.6	3.5	226.0	1.2	0.7	377.4	235.5	R 21.6	R 3.6	R 3.6	-234.2	R 983.8
1994	402.3	137.1	17.1	0.7	76.5	41.9	(s)	6.8	3.7	237.4	1.3	0.6	386.0	247.4	R 22.7	R 3.7	R 3.7	-241.8	R 1,035.8
1995	342.4	124.3	20.8	0.7	85.1	43.0	(s)	7.0	3.6	247.7	0.5	0.6	409.1	287.6	R 25.3	R 3.8	R 3.8	-216.5	R 1,064.9
1996	343.2	121.7	16.3	0.8	94.9	44.9	(s)	6.0	3.5	259.6	0.7	0.7	427.4	306.4	R 25.3	R 3.9	R 3.9	-206.9	R 1,117.2
1997	369.4	134.0	17.9	0.8	100.8	45.2	(s)	6.1	3.7	256.8	0.1	0.6	432.1	311.4	127.9	23.1	4.0	-247.0	1,152.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

^b Includes supplemental gaseous fuels.

^c "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

^d If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

^e "Biomass" is wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

^f "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

^g Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number

indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

^h From 1989, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1989.

kWh=kilowatt-hours. R=Revised data. - =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 30. Residential Energy Consumption Estimates, Selected Years 1960-1997, Arizona

Year	Coal			Natural Gas ^b	Petroleum				Wood	Geothermal	Solar ^c	Electricity ^a	Net Energy	Electrical System Energy Losses ^d	Total
	Bituminous Coal and Lignite ^a	Anthracite ^a	Total		Distillate Fuel ^a	Kerosene ^a	LPG ^a	Total						Million Kilowatthours	
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours	Net Energy	
1960	0	0	0	27	47	0	397	445	R 138	-	-	1,355	-	3,369	-
1965	0	0	0	25	59	9	727	794	R 129	-	-	2,230	-	5,326	-
1970	0	0	0	30	98	68	840	1,006	R 151	-	-	4,327	-	10,486	-
1975	0	0	0	38	216	77	542	836	R 170	-	-	7,138	-	17,217	-
1980	0	0	0	30	2	0	657	659	R 438	-	-	9,637	-	23,434	-
1985	(s)	0	(s)	29	12	3	956	971	R 662	-	-	12,249	-	28,778	-
1986	0	0	0	25	11	3	917	931	R 644	-	-	12,540	-	28,845	-
1987	(s)	0	(s)	28	19	3	1,102	1,124	R 360	-	-	13,821	-	31,579	-
1988	(s)	0	(s)	28	6	3	857	866	R 374	-	-	14,731	-	33,303	-
1989	0	0	0	27	7	(s)	823	830	R 387	-	-	15,248	-	R 34,258	-
1990	(s)	0	(s)	30	11	(s)	772	783	411	-	-	15,378	-	R 33,635	-
1991	(s)	(s)	(s)	31	5	1	872	878	433	-	-	15,641	-	R 34,050	-
1992	1	(s)	1	28	5	2	938	946	456	-	-	16,230	-	R 34,668	-
1993	(s)	0	(s)	28	5	1	827	833	R 433	-	-	16,705	-	35,295	-
1994	0	(s)	(s)	30	4	2	844	849	R 424	-	-	18,212	-	R 38,004	-
1995	2	0	2	27	4	2	971	977	R 471	-	-	18,036	-	R 37,574	-
1996	(s)	0	(s)	28	7	3	784	794	R 470	-	-	19,746	-	R 41,097	-
1997	(s)	0	(s)	31	6	2	784	792	342	-	-	20,683	-	42,953	-

Trillion Btu

1960	0.0	0.0	0.0	28.4	0.3	0.0	1.6	1.9	R 2.8	0.0	0.0	4.6	R 37.6	11.5	R 49.1
1965	0.0	0.0	0.0	27.1	0.3	(s)	2.9	3.3	R 2.6	0.0	0.0	7.6	R 40.6	18.2	R 58.8
1970	0.0	0.0	0.0	31.4	0.6	0.4	3.2	4.1	R 3.0	0.0	0.0	14.8	R 53.3	35.8	R 89.1
1975	0.0	0.0	0.0	39.8	1.3	0.4	2.0	3.7	R 3.4	0.0	0.0	24.4	R 71.3	58.7	R 130.0
1980	0.0	0.0	0.0	30.9	(s)	0.0	2.4	2.4	R 8.8	0.0	0.0	32.9	R 74.9	80.0	R 154.9
1985	(s)	0.0	(s)	29.9	0.1	(s)	3.4	3.5	R 13.2	0.0	0.0	41.8	R 88.5	98.2	R 186.7
1986	0.0	0.0	0.0	26.3	0.1	(s)	3.3	3.4	R 12.9	0.0	0.0	42.8	R 85.4	98.4	R 183.9
1987	(s)	0.0	(s)	29.5	0.1	(s)	4.0	4.2	R 7.2	0.0	0.0	47.2	R 88.0	107.7	R 195.7
1988	(s)	0.0	(s)	29.2	(s)	(s)	3.1	3.2	R 7.5	0.0	0.0	50.3	R 90.1	113.6	R 203.7
1989	0.0	0.0	0.0	28.2	(s)	(s)	3.0	3.1	R 7.7	e (s)	R e 3.1	52.0	R e 94.2	116.9	R e 211.1
1990	(s)	0.0	(s)	31.3	0.1	(s)	2.8	2.9	8.2	(s)	3.2	52.5	98.0	114.8	212.8
1991	(s)	(s)	(s)	32.1	(s)	(s)	3.2	3.2	8.7	(s)	3.2	53.4	100.6	116.2	R 216.8
1992	(s)	(s)	(s)	29.3	(s)	(s)	3.4	3.4	9.1	(s)	3.3	55.4	100.5	118.3	218.8
1993	(s)	0.0	(s)	29.0	(s)	(s)	3.0	3.0	8.7	(s)	3.4	57.0	101.0	120.4	R 221.4
1994	0.0	(s)	(s)	30.5	(s)	(s)	3.1	3.1	8.5	(s)	3.4	62.1	107.7	129.7	237.4
1995	(s)	0.0	(s)	27.9	(s)	(s)	3.5	3.6	9.4	(s)	3.5	61.5	106.0	128.2	234.2
1996	(s)	0.0	(s)	28.0	(s)	(s)	2.8	2.9	9.4	(s)	3.6	67.4	111.3	140.2	R 251.5
1997	(s)	0.0	(s)	31.8	(s)	(s)	2.8	2.9	6.8	(s)	3.8	70.6	115.8	146.6	262.4

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

^b Includes supplemental gaseous fuels.

^c Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1989.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 31. Commercial Energy Consumption Estimates, Selected Years 1960-1997, Arizona

Year	Coal			Natural Gas ^b	Petroleum						Wood	Geothermal	Electricity ^a	Net Energy	Electrical System Energy Losses ^c	Total ^d
	Bituminous Coal and Lignite ^a	Anthracite ^a	Total		Distillate Fuel ^a	Kerosene ^a	LPG ^a	Motor Gasoline	Residual Fuel ^a	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours	Million Kilowatthours			
1960	0	0	0	25	106	0	70	89	39	305	R 3	-	3,302	-	8,214	-
1965	0	0	0	19	131	2	128	137	17	416	R 2	-	3,044	-	7,268	-
1970	0	0	0	23	220	12	148	146	31	557	R 3	-	4,690	-	11,366	-
1975	0	0	0	33	485	14	96	177	83	855	R 3	-	7,162	-	17,277	-
1980	0	0	0	27	280	0	116	179	0	576	R 11	-	9,122	-	22,182	-
1985	1	0	1	25	476	2	169	140	(s)	787	NA	-	12,295	-	28,885	-
1986	0	0	0	24	381	19	162	165	0	727	NA	-	13,088	-	30,105	-
1987	(s)	0	(s)	28	530	21	194	357	0	1,102	NA	-	14,324	-	32,730	-
1988	(s)	0	(s)	28	486	1	151	138	1	776	NA	-	14,924	-	33,739	-
1989	0	0	0	29	374	3	145	128	0	651	NA	-	15,778	-	R 35,450	-
1990	(s)	0	(s)	28	511	2	136	257	0	907	NA	-	16,058	-	R 35,123	-
1991	(s)	(s)	(s)	28	303	2	154	372	11	842	NA	-	15,802	-	R 34,399	-
1992	2	(s)	2	27	226	1	166	308	0	700	NA	-	16,366	-	R 34,957	-
1993	1	0	1	28	167	1	146	191	0	506	R 35	-	16,714	-	35,313	-
1994	0	(s)	(s)	29	253	1	149	34	0	437	R 36	-	17,766	-	R 37,074	-
1995	3	0	3	28	261	1	171	35	0	469	R 36	-	18,562	-	R 38,670	-
1996	(s)	0	(s)	29	403	2	138	35	5	584	R 39	-	19,555	-	R 40,698	-
1997	(s)	0	(s)	30	515	4	138	35	0	692	33	-	20,520	-	42,616	-

Trillion Btu

1960	0.0	0.0	0.0	26.2	0.6	0.0	0.3	0.5	0.2	1.6	R 0.1	0.0	11.3	39.1	28.0	67.1
1965	0.0	0.0	0.0	20.7	0.8	(s)	0.5	0.7	0.1	2.1	(s)	0.0	10.4	33.2	24.8	58.0
1970	0.0	0.0	0.0	24.0	1.3	0.1	0.6	0.8	0.2	2.9	R 0.1	0.0	16.0	R 43.0	38.8	R 81.8
1975	0.0	0.0	0.0	34.3	2.8	0.1	0.4	0.9	0.5	4.7	R 0.1	0.0	24.4	R 63.5	58.9	122.4
1980	0.0	0.0	0.0	28.7	1.6	0.0	0.4	0.9	0.0	3.0	R 0.2	0.0	31.1	R 63.1	75.7	R 138.8
1985	(s)	0.0	(s)	26.5	2.8	(s)	0.6	0.7	(s)	4.1	NA	0.0	41.9	72.6	98.6	171.2
1986	0.0	0.0	0.0	25.0	2.2	0.1	0.6	0.9	0.0	3.8	NA	0.0	44.7	73.4	102.7	176.1
1987	(s)	0.0	(s)	28.7	3.1	0.1	0.7	1.9	0.0	5.8	NA	0.0	48.9	83.3	111.7	195.0
1988	(s)	0.0	(s)	29.3	2.8	(s)	0.6	0.7	(s)	4.1	NA	0.0	50.9	84.3	115.1	199.4
1989	0.0	0.0	0.0	29.8	2.2	(s)	0.5	0.7	0.0	3.4	NA	^e (s)	53.8	87.1	R 121.0	208.0
1990	(s)	0.0	(s)	29.3	3.0	(s)	0.5	1.3	0.0	4.8	NA	(s)	54.8	88.9	119.8	208.8
1991	(s)	(s)	(s)	28.3	1.8	(s)	0.6	2.0	0.1	4.4	NA	(s)	53.9	R 86.6	117.4	203.9
1992	(s)	(s)	0.1	27.9	1.3	(s)	0.6	1.6	0.0	3.5	NA	(s)	55.8	87.4	119.3	206.6
1993	(s)	0.0	(s)	28.3	1.0	(s)	0.5	1.0	0.0	2.5	R 0.7	(s)	57.0	R 88.6	120.5	R 209.1
1994	0.0	(s)	(s)	30.0	1.5	(s)	0.5	0.2	0.0	2.2	R 0.7	(s)	60.6	R 93.5	126.5	R 220.0
1995	0.1	0.0	0.1	29.3	1.5	(s)	0.6	0.2	0.0	2.3	R 0.7	(s)	63.3	R 95.7	131.9	R 227.7
1996	(s)	0.0	(s)	29.3	2.3	(s)	0.5	0.2	(s)	3.1	R 0.8	(s)	66.7	R 99.9	138.9	R 238.7
1997	(s)	0.0	(s)	30.8	3.0	(s)	0.5	0.2	0.0	3.7	0.7	(s)	70.0	105.2	145.4	250.6

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

^b Includes supplemental gaseous fuels.

^c Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^d Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

^e There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1989.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 32. Industrial Energy Consumption Estimates, Selected Years 1960-1997, Arizona

Year	Coal Thousand Short Tons	Natural Gas ^a Billion Cubic Feet	Petroleum									Hydro-electric Power ^b Million kWh	Wood and Waste	Other ^{b,d}	Electricity ^b		Electrical System Energy Losses ^e Million kWh	Total
			Asphalt and Road Oil ^b	Distillate Fuel ^b	Kero-sene ^b	LPG ^b	Lubri-cants ^b	Motor Gasoline	Residual Fuel ^b	Other ^{b,c}	Total				Million kWh	Net Energy		
			Thousand Barrels															
1960	10	14	863	1,227	64	222	81	515	27	0	3,000	0	-	-	1,481	-	3,683	-
1965	4	55	1,110	1,545	21	161	93	437	20	0	3,387	0	-	-	3,331	-	7,952	-
1970	5	58	3,679	1,387	85	253	115	456	55	0	6,031	13	-	-	4,751	-	11,514	-
1975	133	51	2,331	3,113	122	430	205	440	102	39	6,781	14	-	-	6,868	-	16,566	-
1980	643	38	2,061	3,570	73	739	264	309	154	71	7,241	15	-	-	8,003	-	19,461	-
1985	1,915	17	2,563	1,850	11	505	241	404	31	0	5,605	15	-	-	8,457	-	19,869	-
1986	2,289	8	2,530	2,782	33	541	235	419	38	0	6,579	15	-	-	8,358	-	19,225	-
1987	669	18	2,492	2,440	26	586	266	406	17	0	6,233	15	-	-	8,494	-	19,408	-
1988	593	24	2,683	2,031	52	648	257	405	31	0	6,107	15	-	-	9,261	-	20,938	-
1989	689	21	2,386	3,078	47	576	263	420	6	123	6,898	f NA	-	-	9,722	-	R 21,844	-
1990	660	18	2,367	3,103	17	545	271	503	18	129	6,952	NA	-	-	10,034	-	R 21,946	-
1991	689	19	2,181	2,617	34	617	242	368	176	216	6,452	NA	-	-	10,405	-	R 22,650	-
1992	632	20	2,984	2,401	1	934	247	346	94	259	7,265	NA	-	-	11,055	-	R 23,614	-
1993	674	21	2,328	1,707	1	812	251	338	176	131	5,745	NA	-	-	10,989	-	23,218	-
1994	727	26	2,574	1,784	(s)	789	263	366	45	114	5,937	NA	-	-	11,303	-	R 23,587	-
1995	657	28	3,138	2,649	1	745	258	410	70	107	7,377	NA	-	-	11,992	-	R 24,983	-
1996	675	27	2,460	2,768	2	707	251	437	81	121	6,826	NA	-	-	12,783	-	R 26,604	-
1997	702	28	2,704	3,324	2	727	265	457	14	112	7,606	NA	-	-	13,253	-	27,523	-

Trillion Btu

1960	0.2	14.2	5.7	7.1	0.4	0.9	0.5	2.7	0.2	0.0	17.5	0.0	R 1.0	0.0	5.1	R 37.9	12.6	R 50.5
1965	0.1	59.4	7.4	9.0	0.1	0.6	0.6	2.3	0.1	0.0	20.1	0.0	R 1.1	0.0	11.4	R 92.0	27.1	R 119.1
1970	0.1	61.2	24.4	8.1	0.5	1.0	0.7	2.4	0.3	0.0	37.4	0.1	R 1.3	0.0	16.2	R 116.3	39.3	R 155.6
1975	2.6	53.4	15.5	18.1	0.7	1.6	1.2	2.3	0.6	0.2	40.3	0.1	R 1.9	0.0	23.4	R 121.9	56.5	R 178.4
1980	13.1	39.5	13.7	20.8	0.4	2.7	1.6	1.6	1.0	0.4	42.2	0.2	R 11.3	0.0	27.3	R 133.7	66.4	R 200.1
1985	38.8	17.3	17.0	10.8	0.1	1.8	1.5	2.1	0.2	0.0	33.4	0.2	R 13.3	0.0	28.9	R 131.8	67.8	R 199.6
1986	46.3	8.8	16.8	16.2	0.2	2.0	1.4	2.2	0.2	0.0	39.0	0.2	R 23.2	0.0	28.5	R 146.0	65.6	R 211.6
1987	13.3	18.4	16.5	14.2	0.1	2.1	1.6	2.1	0.1	0.0	36.9	0.2	R 23.1	0.0	29.0	R 120.9	66.2	R 187.1
1988	12.3	25.0	17.8	11.8	0.3	2.4	1.6	2.1	0.2	0.0	36.2	0.2	R 24.0	0.0	31.6	R 129.3	71.4	R 200.7
1989	14.3	21.6	15.8	17.9	0.3	2.1	1.6	2.2	(s)	0.7	40.7	R f 0.0	R f 21.5	R f 0.2	33.2	R f 131.5	74.5	R f 206.1
1990	13.3	19.0	15.7	18.1	0.1	2.0	1.6	2.6	0.1	0.8	41.0	0.0	R 11.0	R 0.2	34.2	R 118.8	74.9	R 193.7
1991	13.7	19.7	14.5	15.2	0.2	2.2	1.5	1.9	1.1	1.2	37.9	0.0	R 11.4	R 0.2	35.5	R 118.4	77.3	R 195.7
1992	12.8	20.4	19.8	14.0	(s)	3.4	1.5	1.8	0.6	1.5	42.6	0.0	R 12.2	R 0.2	37.7	R 125.9	80.6	R 206.5
1993	13.5	21.8	15.4	9.9	(s)	2.9	1.5	1.8	1.1	0.7	33.4	0.0	R 11.9	R 0.2	37.5	R 118.4	79.2	R 197.6
1994	14.7	26.7	17.1	10.4	(s)	2.9	1.6	1.9	0.3	0.6	34.8	0.0	R 12.8	R 0.2	38.6	R 127.7	80.5	R 208.2
1995	13.1	28.8	20.8	15.4	(s)	2.7	1.6	2.2	0.4	0.6	43.7	0.0	R 13.2	R 0.2	40.9	R 139.8	85.2	R 225.1
1996	13.4	27.3	16.3	16.1	(s)	2.6	1.5	2.3	0.5	0.7	40.0	0.0	R 13.4	R 0.2	43.6	R 137.9	90.8	R 228.7
1997	13.7	28.5	17.9	19.4	(s)	2.6	1.6	2.4	0.1	0.6	44.7	0.0	13.8	0.2	45.2	146.2	93.9	240.1

^a Includes supplemental gaseous fuels.

^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

^c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

^d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1989.

R=Revised data.

kWh=kilowatthours. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 33. Transportation Energy Consumption Estimates, Selected Years 1960-1997, Arizona

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol ^c	Electricity ^a	Net Energy	Electrical System Energy Losses ^d	Total ^c
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^a	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total				Million Kilowatthours	
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours	Thousand Gallons	Million Kilowatthours	Total ^c
1960	(s)	16	699	1,404	4,721	34	193	11,759	17	18,829	0	0	-	0	-
1965	(s)	18	478	1,790	5,545	40	206	14,423	0	22,482	0	0	-	0	-
1970	(s)	24	427	3,192	6,644	63	229	20,940	0	31,494	0	0	-	0	-
1975	(s)	17	358	4,756	6,995	51	267	27,087	0	39,514	0	0	-	0	-
1980	0	21	281	6,480	7,967	78	347	30,100	0	45,253	0	0	-	0	-
1985	0	19	184	7,630	7,154	92	316	35,604	0	50,979	0	0	-	0	-
1986	0	13	226	7,892	7,697	85	309	37,260	0	53,468	0	0	-	0	-
1987	0	17	207	7,331	8,374	60	349	38,508	0	54,830	0	0	-	0	-
1988	0	18	186	7,742	8,478	65	337	39,673	0	56,480	0	0	-	0	-
1989	0	18	210	7,746	8,157	63	345	40,100	0	56,621	R ^e 2,700	0	-	0	-
1990	0	25	194	8,223	8,501	55	355	38,566	0	55,895	3,119	0	-	0	-
1991	0	24	188	7,300	9,642	57	318	39,853	0	57,357	2,472	0	-	0	-
1992	0	23	158	8,546	8,310	57	324	40,902	0	58,297	3,004	0	-	0	-
1993	0	17	128	11,575	7,892	58	330	42,497	0	62,479	3,353	0	-	0	-
1994	0	25	142	11,026	7,401	84	345	44,793	0	63,791	8,691	0	-	0	-
1995	0	18	139	11,586	7,588	51	339	46,714	0	66,417	26,962	0	-	0	-
1996	0	17	155	13,013	7,922	38	329	48,944	0	70,400	22,783	0	-	0	-
1997	0	19	151	13,351	7,974	34	347	48,391	0	70,249	23,389	0	-	0	-

Trillion Btu															
1960	(s)	16.5	3.5	8.2	25.3	0.1	1.2	61.8	0.1	100.2	0.0	0.0	116.7	0.0	116.7
1965	(s)	19.4	2.4	10.4	30.1	0.2	1.2	75.8	0.0	120.1	0.0	0.0	139.4	0.0	139.4
1970	(s)	25.4	2.2	18.6	36.4	0.2	1.4	110.0	0.0	168.8	0.0	0.0	194.1	0.0	194.1
1975	(s)	17.9	1.8	27.7	38.6	0.2	1.6	142.3	0.0	212.2	0.0	0.0	230.1	0.0	230.1
1980	0.0	22.3	1.4	37.7	43.9	0.3	2.1	158.1	0.0	243.6	0.0	0.0	265.9	0.0	265.9
1985	0.0	19.4	0.9	44.4	39.4	0.3	1.9	187.0	0.0	274.1	0.0	0.0	293.5	0.0	293.5
1986	0.0	13.1	1.1	46.0	42.6	0.3	1.9	195.7	0.0	287.6	0.0	0.0	300.7	0.0	300.7
1987	0.0	17.3	1.0	42.7	46.4	0.2	2.1	202.3	0.0	294.8	0.0	0.0	312.0	0.0	312.0
1988	0.0	19.0	0.9	45.1	47.0	0.2	2.0	208.4	0.0	303.7	0.0	0.0	322.7	0.0	322.7
1989	0.0	19.2	1.1	45.1	45.3	0.2	2.1	210.6	0.0	304.4	R ^e 0.2	0.0	^e 323.7	0.0	^e 323.7
1990	0.0	26.1	1.0	47.9	47.3	0.2	2.2	202.6	0.0	301.1	0.2	0.0	327.2	0.0	327.2
1991	0.0	24.1	1.0	42.5	53.7	0.2	1.9	209.3	0.0	308.7	0.2	0.0	332.8	0.0	332.8
1992	0.0	24.1	0.8	49.8	46.4	0.2	2.0	214.9	0.0	314.0	0.2	0.0	338.2	0.0	338.2
1993	0.0	17.9	0.6	67.4	44.2	0.2	2.0	223.2	0.0	337.7	0.3	0.0	355.6	0.0	355.6
1994	0.0	25.7	0.7	64.2	41.9	0.3	2.1	235.3	0.0	344.6	0.7	0.0	370.2	0.0	370.2
1995	0.0	19.1	0.7	67.5	43.0	0.2	2.1	245.4	0.0	358.8	2.1	0.0	378.0	0.0	378.0
1996	0.0	17.5	0.8	75.8	44.9	0.1	2.0	257.1	0.0	380.7	1.7	0.0	398.3	0.0	398.3
1997	0.0	19.2	0.8	77.8	45.2	0.1	2.1	254.2	0.0	380.2	1.8	0.0	399.3	0.0	399.3

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

^c Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1989.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 34. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1997, Arizona

Year	Coal			Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Wood and Waste	Geothermal Energy	Other ^{b,f}	Total ^g
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil ^{b,c}	Light Oil ^{b,d}	Petroleum Coke ^b	Total						
	Thousand Short Tons				Thousand Barrels									
1960	0	0	0	53	41	3	0	44	0	2,975	18	0	0	-
1965	333	0	333	37	44	3	0	47	0	4,410	0	0	0	-
1970	401	0	401	59	19	1	0	20	0	6,089	0	0	0	-
1975	4,259	0	4,259	18	5,756	1,653	0	7,410	0	7,226	0	0	0	-
1980	10,916	0	10,916	50	1,185	436	0	1,622	0	9,780	0	0	0	-
1985	14,448	0	14,448	42	145	211	0	357	1,130	13,972	0	0	0	-
1986	11,861	0	11,861	31	2	240	0	242	9,976	14,444	0	0	0	-
1987	12,706	0	12,706	27	104	328	0	432	13,458	10,118	0	0	0	-
1988	13,932	0	13,932	25	22	197	0	219	22,940	7,769	0	0	0	-
1989	16,182	0	16,182	51	147	214	0	361	7,850	7,875	0	0	0	-
1990	15,758	0	15,758	24	10	200	0	210	20,598	7,667	0	0	0	-
1991	16,116	0	16,116	23	14	145	0	159	25,096	7,098	0	0	0	-
1992	17,280	0	17,280	31	11	123	0	135	25,609	6,911	0	0	0	-
1993	18,316	0	18,316	20	16	95	0	110	22,049	7,023	0	0	0	-
1994	18,853	0	18,853	24	155	68	0	224	23,171	7,670	0	0	0	-
1995	16,021	0	16,021	19	12	107	0	119	26,985	8,478	0	0	0	-
1996	16,118	0	16,118	19	23	101	0	124	28,840	9,480	0	0	0	-
1997	17,504	0	17,504	23	(s)	110	0	110	29,314	12,401	0	0	0	-

Trillion Btu

1960	0.0	0.0	0.0	55.1	0.3	(s)	0.0	0.3	0.0	32.0	0.2	0.0	0.0	87.6
1965	6.9	0.0	6.9	39.5	0.3	(s)	0.0	0.3	0.0	46.1	0.0	0.0	0.0	92.9
1970	8.5	0.0	8.5	62.4	0.1	(s)	0.0	0.1	0.0	63.9	0.0	0.0	0.0	134.9
1975	89.8	0.0	89.8	18.9	36.2	9.6	0.0	45.8	0.0	75.2	0.0	0.0	0.0	229.8
1980	231.9	0.0	231.9	52.5	7.5	2.5	0.0	10.0	0.0	101.6	0.0	0.0	0.0	396.0
1985	303.2	0.0	303.2	44.2	0.9	1.2	0.0	2.1	12.2	146.0	0.0	0.0	0.0	507.7
1986	249.6	0.0	249.6	32.0	(s)	1.4	0.0	1.4	107.7	150.9	0.0	0.0	0.0	541.6
1987	269.6	0.0	269.6	27.6	0.7	1.9	0.0	2.6	145.0	105.4	0.0	0.0	0.0	550.2
1988	296.7	0.0	296.7	26.2	0.1	1.1	0.0	1.3	246.4	80.2	0.0	0.0	0.0	650.9
1989	342.9	0.0	342.9	52.6	0.9	1.2	0.0	2.2	84.2	82.1	0.0	0.0	0.0	564.0
1990	330.3	0.0	330.3	25.1	0.1	1.2	0.0	1.2	220.0	^R 79.8	0.0	0.0	0.0	656.4
1991	333.8	0.0	333.8	23.9	0.1	0.8	0.0	0.9	269.5	^R 74.1	0.0	0.0	0.0	703.3
1992	356.1	0.0	356.1	31.9	0.1	0.7	0.0	0.8	273.4	71.5	0.0	0.0	0.0	733.7
1993	376.3	0.0	376.3	21.0	0.1	0.6	0.0	0.7	235.5	72.4	0.0	0.0	0.0	705.8
1994	387.6	0.0	387.6	24.3	1.0	0.4	0.0	1.4	247.4	79.1	0.0	0.0	0.0	^R 739.8
1995	329.2	0.0	329.2	19.3	0.1	0.6	0.0	0.7	287.6	87.4	0.0	0.0	0.0	^R 727.7
1996	329.8	0.0	329.8	19.5	0.1	0.6	0.0	0.7	306.4	98.0	0.0	0.0	0.0	754.4
1997	355.6	0.0	355.6	23.7	(s)	0.6	0.0	0.6	311.4	127.9	0.0	0.0	0.0	818.6

^a Includes supplemental gaseous fuels.

^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

^c Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

^e If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

^f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

^g If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

^R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.